ABSTRACT OF THE DISCLOSURE

A pacemaker is operable in a tracking and a non-tracking mode and has an automatic mode switching function for switching the pacemaker into the non-tracking mode of operation in response to the detection of atrial tachycardia. The pacemaker has an atrial detector for detecting atrial events, a ventricular detector for detecting ventricular events, and an atrial interval determination unit for determining an interval between successive atrial events. A comparator compares the atrial interval with a predetermined atrial tachycardia limit value and records a tachycardia indication if the interval is less than the atrial tachycardia limit value. The mode switching unit switches the mode of operation to the non-tracking mode if the number of recorded tachycardia indications reaches a predetermined tachycardia count limit. A cardiac event interval determination unit, in response to the recording of a tachycardia indication, determines additional intervals between cardiac events detected by the atrial detector or the ventricular detector. These additional intervals are supplied to the comparator wherein they are compared with the atrial tachycardia limit value. The recorded number of tachycardia indications is reduced by one if at least one of these additional intervals, during a pacemaker interval between two consecutive ventricular stimulations or between two consecutive R-wave detections, is longer than the tachycardia limit value.